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## ABSTRACT

The Alaska School Effectiveness Project produced several reports in a series of reviews of research literature on such topics as instructional grouping: ability grouping. Using an ERIC search and conventional library methods, the question raised was "Do students in the aggregate perform equally well academically and have comparable attitude and self concepts whether they receive instruction in homogeneous or heterogeneous groups?" The overall conclusion was that high-ability children should receive instruction with one another, and that lower-ability children should receive instruction with higher-ability children. Given the difficulty of such an arrangement, it is recommended that: (1) schools which currently practice heterogeneous grouping and are experiencing satisfactory achievement levels and student morale are advised not to change (provided higher-ability children receive enrichment activities); (2) educators should be made aware of the very negative effects of homogeneous ability grouping on the cognitive and affective development of children classified as low-ability; (3) teachers should be made aware of instructional materials and methods which can be effective with heterogeneous classes; and (4) where the decision has been made to institute or maintain homogeneous grouping, steps should be taken to mitigate negative effects of this grouping format. The document includes item decision displays, a 24 citation bibliography, and individual item reports on the citations. (BRR)

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Topic Summary Report

INSTRUCTIONAL GROUPING: ABILITY GROUPING

Research on School Effectiveness Project

Prepared for:

Alaska Department of Education  
Office of Planning and Research

May 15, 1981

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## PREFACE

This report is one of several in a series of reviews of research literature conducted for the Alaska School Effectiveness Project. Each of the reports addresses a topic which is deemed to have an impact, actual or potential, on school effectiveness. All of the reports have been generated using the same general approach and a common reporting format.

The review process begins with a topical literature search using both computer based ERIC and conventional library methods. Articles and other documents found are analyzed and abstracted into a brief form called an Item Report. Each of the items is then judged against a set of pre-established criteria and ranked on a five-point scale. The collection of Item Reports are then examined for purposes of identifying issues. These issues are stated in the form of hypotheses. Each hypothesis thus generated becomes the subject of a Decision Display. A Decision Display is created by sorting the Item Reports into those which support or negate the hypothesis, are inconclusive, are badly flawed, or are irrelevant. One or more Decision Displays are generated for each topic addressed. A Summary Report is then generated from the consideration of the Decision Displays and the file of Item Reports. Thus, each complete report in the series consists of a Summary Report which is backed up by one or more Decision Displays which in turn are supported by a file of Item Reports. This format was designed to accommodate those readers who might wish to delve into various depths of detail.

This report is not intended to represent the "final word" on the topic considered. Rather, it represents the analysis of a particular collection of research documents at this time. There may be other documents that were not found because of time or other limitations. There may be new research published tomorrow. This present report represents our best judgment of available information at this time. This format allows for modification and re-analysis as new information becomes available or old information is re-interpreted.

For a more complete description of the analysis process see William G. Savard, Procedures for Research on School Effectiveness Project, Northwest Regional Educational Laboratory, December 10, 1980.

Topic: Instructional Grouping: Ability Grouping  
Authors: Kathleen Cotton/W. G. Savard  
Date: May 15, 1981

Ability grouping is a perennial subject of controversy. While homogeneous ability grouping (grouping students for instruction with other students of similar ability levels) is widespread and widely accepted, this practice is also severely criticized by many educators, psychologists, researchers, parents and students.

Homogeneous ability grouping involves using various measures of intelligence, aptitude and/or achievement to place students in instructional groups with others whose test scores are in the same general range. The most common arrangement involves classifying a given group of students into three ability levels. Heterogeneous ability grouping, on the other hand, involves placing students in groups composed of students of varying abilities. Heterogeneous grouping is sometimes achieved by randomly assigning all the students in a school or grade to instructional classes, and sometimes by deliberately assigning them to classes which represent a wide range of ability.

Proponents of homogeneous ability grouping argue that this structure accommodates individual differences by allowing students to work at their own rates with others of similar ability and with methods and materials geared to their level. They also contend that homogeneous grouping makes possible more individual attention from teachers, that students feel challenged to excel within their level and/or to be promoted to a higher group, and that classroom management and the delivery of instruction is made easier for teachers when students are grouped homogeneously. Many homogeneous grouping advocates claim that students achieve more and have more positive attitudes within this arrangement.

Those who favor heterogeneous grouping argue for their preference on several different grounds. Leaving aside for the moment the question of which grouping arrangement produces the most positive student outcomes, many people contend that true homogeneous grouping cannot be achieved and that attempts to achieve it create more problems than they resolve. It is argued, for example, that the testing procedures used to place children in homogeneous groups frequently result in improper placements. And even when initial placement is appropriate, individual strengths and weaknesses, at any given moment and especially as these develop over time, will always bring about a tendency toward heterogeneity within groups. Homogeneous grouping is also criticized on grounds of being undemocratic, of adversely affecting the self-concepts of all children by placing a stigma on members of the lower groups and giving higher-ability children an inflated, unrealistic sense of their own worth. Since most life experiences do not occur in homogeneous ability groups, it is argued, such grouping inhibits the development of flexibility and the capacity to interact successfully with a wide range of people. Critics of homogeneous grouping also contends that this format causes teachers to be less sensitive to individual differences by creating a false sense of the sameness or similarity of students' affective needs, learning styles and so on.

One of the most serious charges leveled at the practice of homogeneous ability grouping is that it favors students of white, middle-class backgrounds and exacerbates problems of social discrimination. Since both formal and informal placement methods frequently reflect white, middle-class values, their application often results in "low-ability" classes which are an extremely heterogeneous mix of the mentally slow, the emotionally disturbed, the physically handicapped, the non-English speaking, the poor and those from minority groups.

Proponents of heterogeneous grouping advance arguments, often impassioned ones, to the effect that heterogeneity in classroom groups permits different patterns of needs and abilities to emerge naturally and to receive respect; that it fosters social understanding and tolerance; that it prepares students to cope with a wide variety of people and situations; and that, since it results in achievement levels comparable to those obtained via homogeneous grouping, heterogeneous ability grouping should be the rule rather than the exception for arranging instructional classes.

It can readily be seen that the ability grouping issue is really several issues. This summary attempts to address those about which systematic research efforts have been conducted and for which meaningful findings are available.

Twenty-four items were examined in preparation for this summary. Twenty of these proved to be valid, relevant research studies or reviews. Twelve were primary sources and eight were secondary ones. Ten writings were concerned with students at the elementary level, four with junior high, one with secondary and five with the whole elementary-secondary range. Outcome areas examined included reading (three studies); math (two studies); science (two studies); general achievement (two studies); and achievement in one or more areas combined with student attitude, student self-concept or both (eleven studies).

### Findings

Some of the items reviewed concerned the effects of either heterogeneous or homogeneous ability grouping on the achievement or affective development of students in general. Others looked at the effects of grouping on one or more categories of students (high-, middle- and low-ability). Still others examined the effects of grouping on students in the aggregate, and then looked

at the discrete effects on students of different ability levels. Because these different kinds of inquiry were carried out, many kinds of findings were generated. These include all possible combinations of type of grouping; level of student ability; kind of outcome and whether the effect was positive, negative, no-difference or inconclusive. To give structure and meaning to these various findings, four hypotheses were generated:

1. Students in the aggregate perform equally well academically and have comparable attitudes and self-concepts whether they receive instruction in homogeneous or heterogeneous groups. This hypothesis was written because, as referenced above, a number of the researchers looked at the effects of different grouping patterns on students generally. Of those who did, some found homogeneous grouping to be advantageous, and some favored heterogeneous grouping, but the most frequently cited finding was that there are no significant differences between the two arrangements. This finding, while apparently true when all effects on all students are averaged, is nevertheless quite misleading, as is demonstrated by the findings emerging from studies of particular groups of students. These are cited below.
2. Homogeneous ability grouping has a positive effect on the achievement, school attitudes and self-concepts of high-ability students. This hypothesis receives a great deal of support from the studies and reviews examined. Academically capable students of all age/grade levels, when grouped homogeneously, consistently outperformed their intellectual counterparts who studied in heterogeneous settings. Findings concerning school attitudes and self-esteem were not quite so consistent, but here, too, the homogeneously grouped, high-ability students evidenced more positive outcomes.

3. Homogeneous ability grouping has a negative effect on the achievement of middle-ability students. Of the researchers who looked at the effects of heterogeneous and homogeneous grouping arrangements on students of different ability levels, few concentrated their inquiries on students of average ability. Hence, there is not a great deal of supporting (or, for that matter, denying) evidence for this hypothesis among the studies reviewed. Such research findings as there were tend to support the hypothesis, though this is far from conclusive. Investigations of the effects of grouping arrangements on the affective development of middle-ability students, as opposed to students of other ability levels or to students in general, were not undertaken in the studies reviewed.
4. Homogeneous ability grouping has a negative effect on the achievement, school attitudes and self-concepts of low-ability students; conversely, heterogeneous grouping of these students has a positive effect on these outcomes. The evidence in support of this hypothesis is very strong. The negative effect of homogeneous grouping on the cognitive and affective development of students classified as low-ability is, in fact, the single greatest concern of those who have addressed the ability grouping issue. Several researchers noted that the presence of higher-ability students in groups with lower-ability children appears to enhance the learning process for the latter. As for affective development, a typical outcome was noted in a study which involved asking students in different ability groups why they thought they had been placed where they were. The preponderance of responses from children in the low-ability group were to the effect that I/we are too dumb; I/we don't know very much.



## Conclusions

It appears that the finding of no-difference between homogeneous and heterogeneous grouping for students in general means something quite different from what might initially be inferred. In most of the studies reviewed, the unit of analysis was the grade, class or instructional group--not the individual student. Therefore, the finding does not mean that students perform equally well in homogeneous or heterogeneous grouping arrangements, but rather that the very different effects on high- middle- and low-ability students average out to a no-difference result. The no-difference finding is, therefore, essentially meaningless. This is an important point, since several researchers who investigated the effects of grouping on students in general simply cited the no-difference finding as if it applied to all ability levels and to all students.

It seems, further, that high-ability students thrive on homogeneous grouping arrangements, both in terms of achievement and affective outcomes. These students perform very well in heterogeneous settings, too, but they do appear to benefit from the faster pace and greater challenge afforded by the homogeneous format. Their school attitudes and self-esteem are enhanced by the homogeneous grouping arrangement as well. Some researchers commented that high-ability children may also benefit from the positive powers of labeling. That is, high-ability children in high-ability instructional groups are, of course, perfectly aware that they are classified as "smart," and this may set in motion a self-fulfilling prophecy which works to their advantage both cognitively and affectively.

Children of average ability appear to perform slightly better in heterogeneous settings than in homogeneous ones, though the effect of grouping on the achievement of these students is not sufficiently researched to permit firm conclusions. No conclusions can be drawn about effects on the school attitudes or self-esteem.

Students in low-ability groups, whether their placement is appropriate or not, appear to suffer both cognitively and affectively from the homogeneous arrangement. If they are simply slow learners, they perform less well academically than slow learners who have the opportunity to study with higher-ability children. Like children of other ability levels, they are aware of how they are classified, and being in the low or "dumb" group negatively impacts their self-esteem and motivation. Students who are classified as low-ability learners for reasons other than simple low ability suffer these same outcomes, apparently because of the negative force of labeling and the lack of interaction with students classified differently. Inappropriate placements which occur because of student socioeconomic status racial or ethnic background, or handicapping conditions also raise social issues which are profoundly disturbing to many writers on the ability grouping issue.

Conclusions about the effects of ability grouping are of a somewhat different nature than these drawn with respect to other instructional grouping inquiries conducted and reported in this series of summaries. The reviews of class size and instructional group size research\* revealed that both class size and group size can affect student outcomes, but that the effects are indirect. To the extent that small group instruction is beneficial for certain students, for example, the benefits are attributed to the kinds of instructional methods and materials used--not to the small group format per se. The above mentioned effects of ability grouping on students of different ability classifications, however, seem to hold true with various instructional methods, in various subject areas and for students of different age/grade

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\*See Research on School Effectiveness Project Topic Summary Reports: Class Size and Instructional Grouping: Group Size, Northwest Regional Educational Laboratory, December 12, 1980 and May 15, 1981, respectively.

levels. The group of students with whom Student X receives instruction, and how Student X feels about being in that group, seem to affect learning and affective development very directly. Some researchers commented that the very different effects of homogeneous grouping on different students are reinforced by teacher attitudes toward and expectations of students in different ability classifications.

### Recommendations

Disraeli once commented wryly that, "Every woman should marry--and no man." Research on ability grouping suggests something similarly paradoxical, namely that high-ability children should receive instruction with one another, and that lower-ability children should receive instruction with higher-ability children. Given the impossibility of such an arrangement, what recommendations can be made based on ability grouping research?

1. Schools which currently practice heterogeneous grouping and are experiencing satisfactory achievement levels and student morale are advised not to change to the homogeneous grouping format. Instead, it is recommended that higher-ability children be provided enrichment experiences to support their greater learning capacities and needs.
2. Administrators and teachers should be made aware of the very negative effects of homogeneous ability grouping on the cognitive and affective development of children classified as low-ability. These educators are invited to consider the use of heterogeneous grouping or a combination of heterogeneous and homogeneous grouping which would place students in heterogeneous arrangements for a part of the school day.
3. Instructional methods and materials which can be effective with heterogeneous classes should be made known to teachers; development of such materials and methods should be undertaken as needed.

4. In cases where the decision has been made to institute or to maintain homogeneous grouping arrangements, several steps should be taken to mitigate the negative effects of this grouping format.
  - a. Students should not be classified through the use of only one measure of ability. Validated measures of learning ability should be used in combination with a systematic process involving teacher and administrator judgment. Efforts should be made to distinguish between learning ability and learning rate.
  - b. Students should be re-evaluated frequently to insure appropriateness of placement.
  - c. Special care should be taken to insure that students not be placed in low-ability groups for reasons of cultural background, emotional or physical handicaps, or the lack of general knowledge that frequently afflicts poor children due to their narrower range of experiences.
  - d. Teachers should seek to mitigate the effects of homogeneous grouping in the classroom setting, encouraging all students to do their best and communicating to higher-ability children that the capacity to learn rapidly and well is a gift, not a right.

INSTRUCTIONAL GROUPING: ABILITY GROUPING  
Decision Display  
#1

Restatement of issue as a hypothesis:

Students in the aggregate perform equally well academically and have comparable attitudes and self-concepts whether they receive instruction in homogeneous or heterogeneous groups.

| Item<br>Number | Short Title | Quality Rating<br>of Study<br>[ ] |
|----------------|-------------|-----------------------------------|
|----------------|-------------|-----------------------------------|

Items which tend to support hypothesis:

|     |   |                   |
|-----|---|-------------------|
| 198 | Berkun, <u>et al.</u> , 1966, Homogeneous Reading Grouping          | [4] (for grade 4) |
| 187 | Brown & Wunderlich, 1976, Open Education & Ability Grouping         | [4]               |
| 206 | Gabel & Herron, 1977, Effects of Grouping & Pacing                  | [4]               |
| 186 | Martin & Pavan, 1976, Research on Non-traditional Practices         | [4]               |
| 178 | Sanford, 1980, Jr. High Ability Grouping                            | [4]               |
| 194 | Baiow & Ruddeii, 1963, Three Types of Grouping                      | [3]               |
| 201 | Zweibelson, <u>et al.</u> , 1965, Team Teaching & Flexible Grouping | [3]               |

Items which tend to deny hypothesis:

|     |  |  |
|-----|--|--|
| 198 | Berkun, <u>et al.</u> , 1966, Homogeneous Reading Grouping | [4] (favored homogeneous for grades 3 & 5) |
| 172 | Esposito, 1973, Ability Grouping Review                    | [4] (favored heterogeneous)                |
| 176 | Flor, 1980, Grouping for Elementary Reading                | [4] (favored heterogeneous)                |
| 179 | Webb, 1977, Individual & Group Learning                    | [4] (favored heterogeneous)                |
| 205 | Plewes, 1979, Mixed Ability Teaching                       | [3] (favored homogeneous)                  |
| 190 | Franseth, 1962, Research Ideas on Grouping                 | [2] (favored heterogeneous)                |

Items which are inconclusive regarding the hypothesis:

|     |   |     |
|-----|---|-----|
| 193 | Bridge, <u>et al.</u> , 1979, Tracking Review | [2] |
|-----|---|-----|

Items which were excluded because they were weak:

None

Items which were excluded because they were judged to be irrelevant to this hypothesis:

- 171 Findlay & Bryan, 1975, PDK Grouping Review
- 174 Schluck, 1977, Grouping and Beginning Readers
- 177 Sorensen, 1978, Organizational Differentiation
- 180 Wilson & Schmits, 1978, Instructional
- 183 Guthrie, 1979, Grouping for Reading\*
- 189 Keliher, 1962, Grouping Question
- 192 Brassell, et al., 1980, Math Achievement & Attitude\*
- 202 French, 1960, School Records on Grouping
- 204 Dewar, 1963, Sixth Grade Ability Grouping\*
- 207 Provus, 1960, Homewood Grouping Study\*
- 208 Mann, 1960, Ability Grouping and Self-Concept

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\*These studies reported findings on the effects of ability grouping on the achievement of particular groups of students rather than students in general.

INSTRUCTIONAL GROUPING: ABILITY GROUPING  
Decision Display  
#2

Restatement of issue as a hypothesis:

Homogeneous ability grouping has a positive effect on the achievement, school attitudes and self-concepts of high-ability students.

| Item<br>Number | Short Title | Quality Rating<br>of Study<br>[ ] |
|----------------|-------------|-----------------------------------|
|----------------|-------------|-----------------------------------|

Items which tend to support hypothesis:

|     |  |     |
|-----|--|-----|
| 192 | Brassell, <u>et al.</u> , 1980, Math Achievement<br>& Attitude | [4] |
| 176 | Flor, 1980, Grouping for Elementary<br>Reading                 | [4] |
| 204 | Dewar, 1963, Sixth Grade Ability Grouping                      | [3] |
| 207 | Provus, 1960, Homewood Grouping Study                          | [3] |
| 183 | Guthrie, 1979, Grouping for Reading                            | [2] |
| 208 | Mann, 1960, Ability Grouping and<br>Self-Concept               | [2] |

Items which tend to deny hypothesis:

|     |  |                             |
|-----|--|-----------------------------|
| 179 | Webb, 1977, Individual & Group<br>Learning | [4] (favored heterogeneous) |
|-----|--|-----------------------------|

Items which are inconclusive regarding the hypothesis:

|     |  |     |
|-----|--|-----|
| 171 | Findlay & Bryan, 1975, PDK Grouping Review | [2] |
|-----|--|-----|

Items which were excluded because they were weak:

None

Items which were excluded because they were judged to be irrelevant to this hypothesis:

- 172 Esposito, 1973, Ability Grouping Review\*
- 174 Schluck, 1977, Grouping and Beginning Readers
- 177 Sorensen, 1978, Organizational Differentiation
- 178 Sanford, 1980, Jr. High Ability Grouping\*
- 180 Wilson & Schmits, 1978, Instructional
- 186 Martin & Pavan, 1976, Research on Nontraditional Practices\*
- 187 Brown & Wunderlich, 1976, Open Education & Ability Grouping
- 189 Keliher, 1962, Grouping Question\*
- 190 Franseth, 1962, Research Leads on Grouping\*
- 193 Bridge, et al., 1979, Tracking Review\*
- 194 Baiow & Ruddeii, 1963, Three Types of Grouping\*
- 198 Berkun, et al., 1966, Homogeneous Reading Grouping\*
- 201 Zweibelson, et al., 1965, Team Teaching & Flexible Grouping\*
- 202 French, 1960, School Records on Grouping
- 205 Plewes, 1979, Mixed Ability Teaching\*
- 206 Gabel & Herron, 1977, Effects of Grouping & Pacing\*

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\*These studies reported findings on the effects of ability grouping on student achievement or affective outcomes, but did not focus on its impact on high-ability students.



INSTRUCTIONAL GROUPING: ABILITY GROUPING  
Decision Display  
#3

Restatement of issue as a hypothesis:

Homogeneous ability grouping has a negative effect on the achievement of middle-ability students.

| Item<br>Number | Short Title | Quality Rating<br>of Study<br>[ ] |
|----------------|-------------|-----------------------------------|
|----------------|-------------|-----------------------------------|

Items which tend to support hypothesis:

|     |  |     |
|-----|--|-----|
| 172 | Esposito, 1973, Ability Grouping Review        | [4] |
| 176 | Flor, 1980, Grouping for Elementary<br>Reading | [4] |
| 171 | Findlay & Bryan, 1975, PDK Grouping Review     | [2] |

Items which tend to deny hypothesis:

|     |   |                           |
|-----|---|---------------------------|
| 204 | Dewar, 1963, Sixth Grade Ability Grouping | [3] (favored homogeneous) |
| 207 | Provus, 1960, Homewood Grouping Study     | [3] (favored homogeneous) |
| 183 | Guthrie, 1979, Grouping for Reading       | [2] (found no difference) |

Items which are inconclusive regarding the hypothesis:

None

Items which were excluded because they were weak:

None

Items which were excluded because they were judged to be irrelevant to this hypothesis:

- 174 Schluck, 1977, Grouping and Beginning Readers
- 176 Flor. 1980, Grouping for Elementary Reading\*
- 177 Sorensen, 1978, Organizational Differentiation
- 178 Sanford, 1980, Jr. High Ability Grouping\*
- 179 Webb, 1977, Individual & Group Learning\*
- 180 Wilson & Schmits, 1978, Instructional
- 186 Martin & Pavan, 1976, Research on Nontraditional Practices\*
- 187 Brown & Wunderlich, 1976, Open Education & Ability Grouping\*
- 189 Keliher, 1962, Grouping Questions\*
- 190 Franseth, 1962, Research Leads on Grouping\*
- 192 Brassell, et al., 1980, Math Achievement & Attitude\*
- 193 Bridge, et al., 1979, Tracking Review\*
- 194 Baiow & Ruddeii, 1963, Three Types of Grouping\*
- 198 Berkun, et al., 1966, Homogeneous Reading Grouping\*
- 201 Zweibelson, et al., 1965, Team Teaching & Flexible Grouping\*
- 202 French, 1960, School Records on Grouping
- 205 Plewes, 1979, Mixed Ability Teaching\*
- 206 Gabel & Herron, 1977, Effects of Grouping & Pacing\*
- 208 Mann, 1960, Ability Grouping and Self-Concept\*

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\*These studies reported findings on the effects of ability grouping on student achievement or affective outcomes, but did not focus on its impact on middle-ability students.

INSTRUCTIONAL GROUPING: ABILITY GROUPING  
Decision Display  
#4

Restatement of issue as a hypothesis:

Homogeneous ability grouping has a negative effect on the achievement, school attitudes and self-concepts of low-ability students; conversely, heterogeneous grouping of these students has a positive effect on these outcomes.

| Item<br>Number | Short Title | Quality Rating<br>of Study<br>[ ] |
|----------------|-------------|-----------------------------------|
|----------------|-------------|-----------------------------------|

Items which tend to support hypothesis:

|     |  |     |
|-----|--|-----|
| 192 | Brassell, <u>et al.</u> , 1980, Math Achievement<br>& Attitude | [4] |
| 176 | Flor, 1980, Grouping for Elementary<br>Reading                 | [4] |
| 207 | Provus, 1960, Homewood Grouping Study                          | [3] |
| 171 | Findlay & Bryan, 1975, PDK Grouping Review                     | [2] |
| 190 | Franseth, 1962, Research Leads on Grouping                     | [2] |
| 189 | Keliher, 1962, Grouping Question                               | [2] |
| 208 | Mann, 1960, Ability Grouping and<br>Self-Concept               | [2] |

Items which tend to deny hypothesis:

|     |   |                           |
|-----|---|---------------------------|
| 178 | Sanford, 1980, Jr. High Ability Grouping  | [4] (favored homogeneous) |
| 204 | Dewar, 1963, Sixth Grade Ability Grouping | [3] (favored homogeneous) |
| 183 | Guthrie, 1979, Grouping for Reading       | [2] (found no difference) |

Items which are inconclusive regarding the hypothesis:

None

Items which were excluded because they were weak:

None

Items which were excluded because they were judged to be irrelevant to this hypothesis:

- 172 Esposito, 1973, Ability Grouping Review\*
- 174 Schluck, 1977, Grouping and Beginning Readers
- 177 Sorensen, 1978, Organizational Differentiation
- 179 Webb, 1977, Individual & Group Learning\*
- 180 Wilson & Schmits, 1978, Instructional
- 186 Martin & Pavan, 1976, Research on Nontraditional Practices\*
- 187 Brown & Wunderlich, 1976, Open Education & Ability Grouping\*
- 193 Bridge, et al., 1979, Tracking Review\*
- 194 Baiow & Ruddeii, 1963, Three Types of Grouping\*
- 198 Berkun, et al., 1966, Homogeneous Reading Grouping\*
- 201 Zweibelson, et al., 1965, Team Teaching & Flexible Grouping\*
- 202 French, 1960, School Records on Grouping
- 205 Plewes, 1979, Mixed Ability Teaching\*
- 206 Gabel & Herron, 1977, Effects of Grouping & Pacing\*

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\*These studies reported findings on the effects of ability grouping on student achievement or affective outcomes, but did not focus on its impact on low-ability students.

# BIBLIOGRAPHY

| Item<br>No. | Citation  |
|-------------|---|
| 194         | Baiow, I. H. & Ruddeii, A. K. The effects of three types of grouping on achievement. <u>California Journal of Educational Research</u> , 1963, <u>14</u> , 108-117.   |
| 198         | Berkun, M. M., Swanson, L. W. & Sawyer, D. M. An experiment on homogeneous grouping for reading in elementary classes. <u>Journal of Educational Research</u> , 1966, <u>59</u> (9), 413-414.   |
| 192         | Brassell, A., Petry, S. & Brooks, D. M. Ability grouping, mathematics achievement and pupil attitudes toward mathematics. <u>Journal for Research in Mathematics Education</u> , 1980, <u>11</u> , 22-28.   |
| 193         | Bridge, R. G., Judd, C. M. & Moock, P. R. <u>The determinants of educational outcomes: The impact of families, peers, teachers and schools.</u> (Chapter 8, Section 5.0.: Ability Grouping [Tracking]). Cambridge, MA: Ballinger, 1979.   |
| 187         | Brown, S. W. & Wunderlich, D. W. <u>The effect of open concept education and ability grouping on achievement level concerning the teaching of fifth grade mathematics.</u> Paper Presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1976, (ERIC/EDRS, No. ED 128 197) |
| 204         | Dewar, J. A. Grouping for arithmetic instruction in sixth grade. <u>Elementary School Journal</u> , 1963, <u>63</u> , 266-269.  |
| 172         | Esposito, D. Homogeneous and heterogeneous ability grouping: Principal findings and implications for evaluating and designing more effective educational environments. <u>Review of Educational Research</u> , 1973, <u>43</u> , 163-179.   |
| 171         | Findlay, W. & Bryan, M. <u>The pros and cons of ability grouping.</u> Fastback No. 66, Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1975.  |

| Item<br>No. | Citation   |
|-------------|--|
| 176         | Flor, R. A. <u>A review of the literature concerning grouping plans for elementary reading instruction, 1965-1979.</u> Reed College, 1980. (ERIC/EDRS Ed. No. 186 877)   |
| 190         | Franseth, J. Does grouping make a difference in pupil learning? Research offers leads. In M. Rasmussen (Ed.), <u>Toward Effective Grouping</u> , Washington, D. C.: Association for Childhood Education International, 1962. |
| 202         | French, J. W. Evidence from school records on the effectiveness of ability grouping. <u>Journal of Educational Research</u> , 1960, <u>54</u> , (3), 83-91.  |
| 206         | Gabel, D. & Herron, J. D. The effects of grouping and pacing on learning rate, attitude and retention in ISCS Cl. rooms. <u>Journal of Research in Science Teaching</u> , 1977, <u>14</u> , 385-399.                         |
| 183         | Guthrie, J. T. Grouping for reading. <u>The Reading Teacher</u> , 1979, <u>32</u> , 500-501.   |
| 189         | Keliher, A. V. The grouping question--1930 to 1962. In M. Rasmussen (Ed.), <u>Toward Effective Grouping</u> , Washington, D.C.: Association for Childhood Education International, 1962.                                     |
| 208         | Mann, M. What does ability grouping do to the self-concept? <u>Childhood Education</u> , 1960, <u>36</u> , 357-360.  |
| 186         | Martin, L. S. & Pavan, B. N. Current research on open space, nongrading, vertical grouping and team teaching. <u>Phi Delta Kappan</u> , 1976, <u>57</u> , 310-315.   |
| 205         | Plewes, J. A. Mixed-ability teaching--a deterioration in performance. <u>Journal of Research in Science</u> , 1979, <u>16</u> , 229-236.   |
| 207         | Provus, M. M. Ability grouping in arithmetic. <u>Elementary School Journal</u> , 1960, <u>60</u> , 391-398.  |
| 178         | Sanford, J. P. <u>Comparison of heterogeneous and homogeneous junior high classes.</u> R & D Report No. 6108, Research and Development Center for Teacher Education, The University of Texas at Austin, February 1980.       |

| Item<br>No. | Citation  |
|-------------|---|
| 174         | Schluck, C. G. <u>The effects of ability grouping upon the self-confidence and achievement of students who are learning to read.</u> Paper presented at the Annual Meeting of the American Educational Research Association, New York, April 1977. (ERIC/EDRS No. ED 138 943) |
| 177         | Sorensen, A. B. <u>The organizational differentiation of students in schools.</u> Report No. 480-78, Institute for Research on Poverty, Wisconsin University, Madison, Wisconsin, February 1978. (ERIC/EDRS No. ED 163 597)   |
| 179         | Webb, N. H. <u>Learning in individual and small group settings.</u> Technical Report No. 7, Office of Naval Research, Arlington, Virginia, October 1977. (ERIC/EDRS No. ED 151 699)   |
| 180         | Wilson, B. J. & Schmits, D. W. What's new in ability grouping? <u>Phi Delta Kappan</u> , 1978, <u>59</u> , 535-536.   |
| 201         | Zweibelson, I., Bahnmuller, M. & Lyman, L. Team teaching and flexible grouping in the junior high school social studies. <u>The Journal of Experimental Education</u> , 1965, <u>3</u> , 20-25.   |

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 171

LOCATION: NWREL Info. Cntr./Pamphlet File

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Findlay, W. & Bryan, M. The pros and cons of ability grouping.  
Fastback No. 66, Bloomington, Indiana: Phi Delta Kappa Educational  
Foundation, 1975.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Findlay & Bryan, 1975, PDK Grouping Review

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT   /   IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE \_\_\_\_ SECONDARY SOURCE   X   DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      [2]                      3                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

Details on the studies reviewed are not provided, but the presentation and analysis of the findings are clear. Recommendations made may represent more of a philosophical stance than an analysis of research.

SYNOPSIS:

This monograph proports to be a summary of findings emerging from recent research on ability grouping.



ITEM NUMBER: 171

SHORT TITLE: Findlay & Bryan, 1975  
PDK Grouping Review

RESEARCHER'S FINDINGS:

A list of 35 findings is presented, findings which are quite consistent with those emerging from other research in this area. These include that ability grouping is widely practiced and widely approved of by school personnel, though most teachers prefer not to teach those groups classified as low-ability. Homogeneous grouping across the subjects of the school curriculum is impossible to achieve due to the unique strengths and weaknesses of each individual. Socioeconomic and social class differences are increased by ability grouping. Ability grouping produces conflicting evidence of usefulness in promoting improved achievement in high-ability children and almost uniformly unfavorable evidence for promoting scholastic achievement in average- or low-achieving groups. The kinds of tests used to classify students reflect white middle-class values, and this causes children from racial and ethnic minorities and low socioeconomic backgrounds to be labeled low-ability. The self-concepts and achievement of middle- and low-ability children are adversely affected by ability grouping. Low-ability groups tend to be a heterogeneous mix of the mentally slow, the emotionally disturbed, the physically handicapped, the non-English speaking, the poor and those from minority groups. Children are infrequently re-evaluated to determine whether their group placement is appropriate.

RESEARCHER'S CONCLUSIONS:

The conclusions of Findlay and Bryan are in the form of recommendations, as follows:

Ability grouping, as usually practiced should not be used. Ability grouping in specific subjects may be used to advantage and need to be tested to insure that the needs of low-ability children are met. Provision should be made for frequent review of each individual's placement. Peer tutoring, team teaching and individually programmed instruction should be employed and used as appropriate. Heterogeneous grouping in a classroom atmosphere of cooperation and helping should be the rule. Favorable self-concept should be a goal in itself, but is also a supportive factor in learning. Teacher training should include emphasis on welcoming diversity in children.

REVIEWER'S NOTES AND COMMENTS:

None

2.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 172

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Esposito, D. Homogeneous and heterogeneous ability grouping: Principal findings and implications for evaluating and designing more effective educational environments. Review of Educational Research, 1973, 43, 163-179.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Esposito, 1973, Ability Grouping Review

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE \_\_\_\_ SECONDARY SOURCE ☒ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      [4]                      5                      (Strong)

BRIEF DISCUSSION OF RATING:

This is a very good review of the significant research on ability grouping and is frequently cited by later researchers.

SYNOPSIS:

This is a review of research findings concerning the effects of homogeneous and heterogeneous ability grouping on academic achievement and affective development, and also presents research findings on the ethnic and socioeconomic consequences of homogeneous ability grouping.

ITEM NUMBER: 172

SHORT TITLE: Esposito, 1973  
Ability Grouping Review

RESEARCHER'S FINDINGS:

1. Homogeneous ability grouping as currently practiced shows no consistent positive value for helping students generally, or particular groups of students, to achieve more scholastically or to experience more effective learning conditions.
2. The findings regarding the impact of homogeneous ability grouping on affective development are essentially unfavorable.
3. Homogenous ability grouping is a separative educational policy which is ostensibly based on test performance, but in practice separates students according to socioeconomic status and, to a lesser degree, according to ethnic status.
4. Where either homogeneous or heterogeneous ability grouping is related to achievement gains, it has also been found that the grouping was accompanied by major modifications in instructional practice, modifications which may well have been responsible for the improvements. Variables other than ability grouping appear to related substantially to children's personal growth or lack of growth.

RESEARCHER'S CONCLUSIONS:

Homogenous ability grouping does far more harm than good to the scholastic and affective development of children as a whole. Moreover, both homogeneous and heterogeneous grouping, as currently practiced, fail to incorporate many program conditions which have been shown to relate to effective teaching and learning. These include: (1) frequent teacher student cortacts which can provide teachers with information with which to plan individual student activities; (2) flexibility in the use of the educational environment so that children can engage in a variety of activities which relate to individual strengths and weaknesses; (3) the opportunity for individual children to work in a variety of situations so that educational planners can observe and identify conditions which promote scholastic and social success; (4) the opportunity for small groups of teachers who develop curricula for a common group of children to plan together to address the unresolved learning problems of individual children.

REVIEWER'S NOTES AND COMMENTS:

A copy of the review may be found in the backup file on Ability Grouping.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 174

LOCATION: NWREL Info. Cntr./Microfiche

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Schluck, C. G. The effects of ability grouping upon the self-confidence and achievement of students who are learning to read. Paper presented at the Annual Meeting of the American Educational Research Association, New York, April 1977. (ERIC/EDRS No. ED 138 943)

DESCRIPTORS: Ability Grouping

SHORT TITLE: Schluck, 1977, Grouping and Beginning Readers

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT      IRRELEVANT ✓ FOR PRESENT PURPOSE

PRIMARY SOURCE      SECONDARY SOURCE      DISSERTATION ABSTRACT     

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This study concerned preservice elementary teachers and, as such, falls outside the areas of concern of the Research on School Effectiveness Project. The study does, however, convincingly demonstrate that students' beliefs about which ability group they are in (high, middle, low) affects both their achievement and their confidence in their ability.

ITEM NUMBER: 174

SHORT TITLE: Schluck, 1977  
Grouping and Beginning Readers

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 176

LOCATION: NWREL Info. Cntr./Microfiche

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Flor, R. A. A review of the literature concerning grouping plans for elementary reading instruction, 1965-1979. Reed College, 1980. (ERIC/EDRS Ed. No. 186 877)

DESCRIPTORS: Ability Grouping, Group Size

SHORT TITLE: Flor, 1980, Grouping for Elementary Reading

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE \_\_\_\_ SECONDARY SOURCE ☒ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      [4]                      5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a good review which clearly identifies patterns emerging from an array of research studies.

SYNOPSIS:

This review was undertaken in an attempt to answer the following question: Does research indicate which type of grouping for reading instruction is most effective in grades one to six? Twenty-one studies were reviewed.

ITEM NUMBER: 176

SHORT TITLE: Flor, 1980  
Grouping for Elementary Reading

RESEARCHER'S FINDINGS:

Beginning instruction in reading in grades 1 and 2 was most effective in self-contained classrooms with a limited number of pupils. Sex grouping for reading favored boys in the first grade and was detrimental to girls. Studies of non-graded classes were almost equally divided for and against effective reading instruction.

In grades 3 and 4, homogeneous, small classes were found to be effective, as was a combination of heterogeneous grouping and individualized instruction for fourth graders.

For grades 5 and 6, homogeneous grouping for high ability students was favored, with heterogeneous grouping being favored for average and below average students.

RESEARCHER'S CONCLUSIONS:

None drawn.

REVIEWER'S NOTES AND COMMENTS:

None

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 177

LOCATION: NWREL Info. Cntr./Microfiche

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Sorensen, A. B. The organizational differentiation of students in schools. Report No. 480-78, Institute for Research on Poverty, Wisconsin University, Madison, Wisconsin, February 1978.  
(ERIC/EDRS No. ED 163 597)

DESCRIPTORS: Ability Grouping

SHORT TITLE: Sorensen, 1978, Organizational Differentiation

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT     IRRELEVANT ✓ FOR PRESENT PURPOSE

PRIMARY SOURCE     SECONDARY SOURCE     DISSERTATION ABSTRACT    

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This paper discusses a variety of ways that grouping by age, ability, and so on, may affect student outcomes. It is not a research study.



ITEM NUMBER: 177

SHORT TITLE: Sorensen, 1978  
Organizational Differentiation

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

3.5

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 178

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Sanford, J. P. Comparison of heterogeneous and homogeneous junior high classes. R & D Report No. 6108, Research and Development Center for Teacher Education, The University of Texas at Austin, February 1980.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Sanford, 1980, Junior High Ability Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      [4]                      5                      (Strong)

BRIEF DISCUSSION OF RATING:

This is a good, well-designed and executed study.

SYNOPSIS:

This study was part of a larger research effort, the Junior High Classroom Organization Study (JHCOS), conducted by the R & D Center for Teacher Education in Austin, Texas.

This part of the study sought to determine the effects on achievement of participation in very heterogeneous classes (those with a grade level range of three to ten years) as opposed to participation in less heterogeneous classes (a range of three to four years). The following kinds of data were gathered on teachers and students in 24 English classes: reports by classroom observers (narrative, Likert scale, student engagement rate counts); students' entering and end-of-year achievement scores; student ratings of teachers; teacher self-reports; end-of-year management factor scores for teachers.

ITEM NUMBER: 178

SHORT TITLE: Sanford, 1980  
Junior High Ability Grouping

RESEARCHER'S FINDINGS:

1. Increased heterogeneity of students' entering academic levels limits the extent to which teachers can successfully adapt instruction to meet the needs of individual students.
2. Teachers in extremely heterogeneous classes may be less able to meet the affective needs of their students.
3. Extreme class heterogeneity is associated with a lessened degree of task engagement and student cooperation.
4. Extreme class heterogeneity was not related to mean class achievement gains or to student ratings of the teacher; however, there was indication that achievement gains of lower ability students may be lower in extremely heterogeneous classes.
5. In extremely heterogeneous classes, teachers tend to use the following strategies: a) special attention and assistance to lower ability students; b) limited use of within-class grouping and differentiation of materials or assignments; c) some differential grading; d) limited use of peer tutoring; e) provision of frequent academic feedback.

RESEARCHER'S CONCLUSIONS:

"...the results of this study do not amount to a caveat against heterogeneous ability grouping in English classes. They do warrant a loud warning: If, in consideration of the social psychologists' case against homogeneous ability grouping and tracking, school systems feel impelled to abandon ability grouping and 'special' classes for some students, then they must recognize that the extremely heterogeneous classes that result are indeed also 'special'. They place extraordinary demands on teachers' time, attention and classroom management skills.... Finally, findings of this study suggest that school districts should place a high priority on helping their teachers improve their classroom management and organizational skills."

REVIEWER'S NOTES AND COMMENTS:

A copy of the report may be found in the backup file on Ability Grouping.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 179

LOCATION: NWREL Info. Cntr./Microfiche

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Webb, N. H. Learning in individual and small group settings.  
Technical Report No. 7, Office of Naval Research, Arlington,  
Virginia, October 1977. (ERIC/EDRS No. ED 151 699)

DESCRIPTORS: Ability Grouping, Group Size

SHORT TITLE: Webb, 1977, Individual and Group Learning

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      [4]                      5                      (Strong)

BRIEF DISCUSSION OF RATING:

This is a carefully done study which identifies group factors that may influence student behavior and achievement.

SYNOPSIS:

This study investigated the effects of individual learning settings, mixed-ability group settings and uniform-ability settings on the mathematics achievement of 11th grade students. In Part I of the study, 48 students worked both individually and in 12 four-person groups (some mixed-ability and some uniform-ability), and in Part II, 18 students performed tasks individually. Pre-tests, immediate post-tests and delayed post-tests were administered; and student task behavior was observed and recorded.

ITEM NUMBER: 179

SHORT TITLE: Webb, 1977

Individual and Group Learning

RESEARCHER'S FINDINGS:

Mixed-ability grouping had the most positive effect on achievement, followed by individual learning and then uniform-ability grouping. It was also found that in the mixed-ability groups, high-ability students explained to less able students. In uniform-ability groups, high-ability students were less vocal. Those students who assisted others in their group to learn showed excellent delayed performance; those who did not showed poor delayed performance. Active participation was beneficial for all ability levels.

RESEARCHER'S CONCLUSIONS:

The effect of the learning setting depends on the ability of the student, the ability of the student relative to the ability of the group, and the role the student plays in the group.

REVIEWER'S NOTES AND COMMENTS:

None

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 180

LOCATION: NWREL Info. Cntr./Periodicals

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Wilson, B. J. & Schmits, D. W. What's new in ability grouping?  
Phi Delta Kappan, 1978, 59, 535-536.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Wilson & Schmits, 1978, Ability Grouping Article

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT    IRRELEVANT    ✓ FOR PRESENT PURPOSE

PRIMARY SOURCE    SECONDARY SOURCE    DISSERTATION ABSTRACT   

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This article cites some research findings concerning ability group, but is not really a review. It also reports findings of a study which examined the attitudes of teachers toward ability grouping, but does not address the effects of ability grouping on student outcomes.

ITEM NUMBER: 180

SHORT TITLE: Wilson & Schmits, 1978  
Ability Grouping Article

RESEARCHER'S FINDINGS:

RESEARCHER'S CONCLUSIONS:

REVIEWER'S NOTES AND COMMENTS:

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 183

LOCATION: NWREL Info. Cntr./Periodicals

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Guthrie, J. T. Grouping for reading. The Reading Teacher, 1979, 32, 500-501.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Guthrie, 1979, Grouping for Reading

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE \_\_\_\_ SECONDARY SOURCE X DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a very cursory review of only two items, one review and one study.

SYNOPSIS:

In this article, the author discusses the findings merging from a review concerning the effects of ability grouping and a study to do with the effects of social grouping.



ITEM NUMBER: 183

SHORT TITLE: Guthrie, 1979  
Grouping for Reading

RESEARCHER'S FINDINGS:

Children who are at the lower end of the achievement distribution in a heterogeneous class learn as well as children in a low ability homogeneous class. However, in a heterogeneous class, children at the medium and higher ability levels learn less than medium and higher ability children in homogeneous classes.

Achievement and affective measures are higher in "diffuse" classes (classes in which each child is regarded as a friend by at least one other child) than in centralized classes (those in which a few children are well-liked, but the majority do not have good friends).

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RESEARCHER'S CONCLUSIONS:

Heterogeneous versus homogeneous ability grouping makes little difference for lower ability children, but the medium and higher ability children learn more in homogeneously grouped classes.

The author does not suggest that the kind of social pattern present in a class is or should be school-controllable. He does suggest, however, that placing good friends of similar ability levels together for special projects may have positive effects on achievement and affective development.

REVIEWER'S NOTES AND COMMENTS:

None

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 186

LOCATION: NWREL Info. Cntr./Periodicals

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Martin, L. S. & Pavan, B. N. Current research on open space, nongrading, vertical grouping and team teaching. Phi Delta Kappan, 1976, 57, 310-315.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Martin & Pavan, 1976, Research on Nontraditional Practices

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      [4]                      5                      (Strong)

BRIEF DISCUSSION OF RATING:

The large volume of research on these topics is synthesized clearly. An excellent bibliography is included.

SYNOPSIS:

This article is composed of research summaries on four topics which are related in that they represent nontraditional approaches to instruction: open space, nongrading, vertical (or heterogeneous) grouping, and team teaching.

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ITEM NUMBER: 186

SHORT TITLE: Martin & Pavan, 1976  
Research on Nontraditional Practices

RESEARCHER'S FINDINGS:

- Open space: The studies as a whole do not find that open space school organization promotes any real differences in learning outcomes from self-contained structures. There is some evidence that open space organization enhances student attitudes.
- Nongrading: The research tends to support nongrading as a producer of increased academic achievement and more positive attitudes.
- Heterogeneous Grouping: Cognitive outcomes appear to be the same in varied grouping arrangements, but there is evidence of social, affective and instructional advantages in the heterogeneous arrangement.
- Team Teaching: There appears to be no particular advantage or disadvantage regarding achievement. Students and teachers have expressed positive attitudes about team teaching.

RESEARCHER'S CONCLUSIONS:

"...the research to date indicates that such innovations [as those discussed in this review], when properly interpreted and implemented, may be a step toward educational improvement and are, in any case, valid alternatives to the traditional mode of teaching."

REVIEWER'S NOTES AND COMMENTS:

The bibliography accompanying the review may be found in the backup file on Ability Grouping.

4.5

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 187

LOCATION: NWREL Info. Cntr./Microfiche

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Brown, S. W. & Wunderlich, D. W. The effect of open concept education and ability grouping on achievement level concerning the teaching of fifth grade mathematics. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1976. (ERIC/EDRS, No. ED 128 197)

DESCRIPTORS: Ability Grouping

SHORT TITLE: Brown & Wunderlich, 1976, Open Education & Ability Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a well-designed and conducted study.

SYNOPSIS:

The purpose of this study was to determine if open education and grouping students according to ability would result in greater achievement in mathematics than might occur in a heterogeneous, self-contained classroom. One hundred twenty-five fifth grade math students received mathematics instruction in four different kinds of settings: 1) ability grouped/open environment/team teaching; 2) heterogeneous/open environment/team teaching; 3) homogeneous/self-contained classroom/single teacher; and 4) heterogeneous/self-contained/single teacher. Each class was observed four times and information about the learning environment was recorded. Student perceptions of the learning environment were also gathered. SRA math achievement tests were administered, initially to group the students in the homogeneous classes, and later to determine the achievement gains of students in the different instructional settings.

ITEM NUMBER: 187

SHORT TITLE: Brown & Wunderlich, 1976  
Open Education & Ability Grouping

RESEARCHER'S FINDINGS:

Results indicated no significant differences among groups on math achievement. A small difference was observed in favor of those classes which were not team taught.

As concerns the learning environment, the data indicated that there was a higher satisfaction level and greater cohesiveness, in the heterogeneous classes. The ability grouped classes and the team taught classes evidenced greater friction than other classes. No differences were noted as regards the degree of competition.

RESEARCHER'S CONCLUSIONS:

"The effect of ability grouping and of team-teaching on mathematics achievement remains inconclusive. The finding that single teacher units result in greater computational skill for students may be an indication of more drill and practice activities in this type of setting than in the team taught setting.

"The students perceptions of the learning environment uncovered a more concise body of evidence for heterogeneous grouping."

REVIEWER'S NOTES AND COMMENTS:

None

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 189

LOCATION: NWREL Info. Cntr./Pamphlet File

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Keliher, A. V. The grouping question--1930 to 1962. In M. Rasmusen (Ed.), Toward Effective Grouping, Washington, D.C.: Association for Childhood Education International, 1962.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Keliher, 1962, Grouping Question

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE \_\_\_\_ SECONDARY SOURCE X DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

The research studies referenced are not recent ones, nor are details about them offered. This is not a true literature review, but rather a selection of evidence which "matches" the author's own findings.

SYNOPSIS:

This interestingly structured article reports the major findings of the author's own 1931 study on homogeneous ability grouping, and then cites findings from research conducted over the next thirty years--findings which are consistent with those of the 1931 research. More than a dozen studies are referenced.

ITEM NUMBER: 189

SHORT TITLE: Keliher, 1962  
Grouping Question

RESEARCHER'S FINDINGS:

Both the original Keliher study and many subsequent studies found that testing procedures followed to group students do not in fact result in homogeneous ability groups, and that grouping does not produce the expected reduction in ability variation even for the abilities measured by the tests. It was also generally found that ability level varies greatly within the same individual over time and from subject to subject, though most grouping strategies do not accommodate themselves to these factors.

Low-ability students experience detrimental effects from homogeneous grouping practices, both in terms of achievement and self-concept.

RESEARCHER'S CONCLUSIONS:

"Homogeneous grouping, as we now have it, appears undesirable. The measurement bases requisite for such grouping presuppose its major concern with the partial, academic phases of life. Acceptance of the philosophy that education is to concern itself with the whole child means rejection of a device which selects for consideration only certain of the individuals' abilities and traits. In the light of sound theory and science of education, homogeneous grouping should not be employed. In the light of evidence concerning the results proposed for grouping, it does not achieve those results. Therefore, the major conclusion is that homogeneous grouping is not desirable in our elementary schools."

REVIEWER'S NOTES AND COMMENTS:

None

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 190

LOCATION: NWREL Info Cntr./Pamphlet File

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Franseth, J. Does grouping make a difference in pupil learning? Research offers leads. In M. Rasmussen (Ed.), Toward Effective Grouping, Washington, D. C.: Association for Childhood Education International, 1962.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Franseth, 1962, Research Leads on Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE \_\_\_\_ SECONDARY SOURCE ☒ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a review of older research (1931-1962) and offers no detail about the design or populations of the studies reviewed.

SYNOPSIS:

In this paper, findings from several studies on ability grouping are examined and utilized by the author to challenge some common assumptions about the practice of ability grouping at the elementary school level.



ITEM NUMBER: 190

SHORT TITLE: Franseth, 1962  
Research Leads on Grouping

RESEARCHER'S FINDINGS:

Evidence indicates that changes within individuals are continually taking place so that homogeneity in achievement levels...will continue to move toward heterogeneity--especially in the early grades.

There are numerous flaws in the process of testing children for purposes of grouping.

Learning ability and learning rate are often confused, and this can lead to improper placement of children in groups.

Homogeneous grouping sometimes lowers teacher recognition of the need to provide for individual differences.

Grouping by ability appears not to contribute to the development of positive attitudes and healthy self-concepts, especially among slow learners.

RESEARCHER'S CONCLUSIONS:

"There is reason to conclude that, for some children at least, a focus on ability grouping procedures may produce undesirable learning effects.

"...except for a limited and short-time basis, it is unlikely that dividing children into ability groups can actually be accomplished with any assurance or accuracy, especially in the early years.

"...we...recognize the importance of learning gains that result from a number of different kinds of grouping procedures--interest, friendship, work committee, study group and others designed to serve many different purposes and changing needs."

REVIEWER'S NOTES AND COMMENTS:

None

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 192

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Brassell, A., Petry, S. & Brooks, D. M. Ability grouping, mathematics achievement and pupil attitudes toward mathematics. Journal for Research in Mathematics Education, 1980, 11, 22-28.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Brassell, et al., 1980, Math Achievement and Attitude

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study was carefully structured and carried out.

SYNOPSIS:

This study was designed to determine what relationships exist (1) between student attitude toward mathematics and student placement in an ability grouping hierarchy; and (2) between student attitude toward math and student achievement in math. The Mathematics Attitude Inventory (MAI) was administered to 714 seventh graders in five junior high schools. Student math achievement data were analyzed in relation to attitude and in relation to students' placement in the schools' ability grouping structures. The study looked at both the student's ability group (low, medium, high) and at his/her ability relative to others in the same ability group. The MAI provided student attitude data in six areas: attitude toward teacher, feelings about the value of mathematics in society, anxiety toward mathematics, self-concept regarding mathematics, enjoyment of mathematics and mathematics motivation.

ITEM NUMBER: 192

SHORT TITLE: Brassell, et al., 1980  
Math Achievement and Attitude

RESEARCHER'S FINDINGS:

Students in the highest ability group (of ?) had the best attitudes toward math. Student math achievement scores were related to ability grouping (highest ability group had highest scores, etc.). Students of high ability relative to others in the same ability group had much more positive attitudes than those whose ability was low relative to others in their group, especially as regards self-concept vis a vis mathematics. Low-ability students within each group were also found to have more anxiety about mathematics performance.

RESEARCHER'S CONCLUSIONS:

"Mathematics self-concept and mathematics anxiety appear to be important correlates of mathematics achievement. The implications of these findings suggest that teachers must attend to self-concept enhancement and anxiety in mathematics contexts."

The authors suggest that special attention be given to students in the middle group and especially those at the lower end of this group, as they were found to have the lowest self-concepts and highest anxiety. As these students are less likely than very high- or low-ability students to receive extra help within many school structures, special efforts should be made to help them. Teachers should be aware that student attitudes toward teachers are an important feature of all-over student attitude toward math.

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the backup file on Ability Grouping.

While these researchers accept ability grouping as a fact of life rather than arguing for another alternative, they do acknowledge that certain ability group placements seem to affect students adversely and suggest various ways that these negative effects might be mitigated.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 193

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Bridge, R. G., Judd, C. M. & Moock, P. R. The determinants of educational outcomes: The impact of families, peers, teachers and schools. (Chapter 8, Section 5.0.: Ability Grouping [Tracking]). Cambridge, MA: Ballinger, 1979.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Bridge, et al., 1979, Tracking Review

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE \_\_\_\_ SECONDARY SOURCE ☒ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      [2]                      3                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

Because this review is confined to a certain type of study, the full range of findings on ability grouping is not reflected.

SYNOPSIS:

The authors of this book reviewed 28 major input-output studies and organized the findings emerging from them into five major sections: (1) individual student characteristics, (2) family characteristics, (3) peer group (student body) characteristics, (4) teacher characteristics, and (5) school characteristics.

The section of the book devoted to findings about ability grouping is based on three major input-output studies and references other research conducted since 1965. The studies concerned both elementary and secondary students. Two involved black children and one concerned white children.

ITEM NUMBER: 193

SHORT TITLE: Bridge, et al., 1979  
Tracking Review

RESEARCHER'S FINDINGS:

The results of the input-output studies indicate that, on the average, tracking has a negative effect on the achievement of both blacks and whites.

There is less consistency when one considers a wider range of studies (e.g., the 1968 NEA review of 35 tracking studies). Studies on tracking produced findings so contradictory that Jencks, et al., concluded "if tracking affects test scores at all, the effect is too small to be pedagogically significant."

Ability grouping was found to have a negative effect on self-concept for some students, a positive effect for others and for still others, no effect at all.

RESEARCHER'S CONCLUSIONS:

"The inconsistency among different tracking studies suggests that some critical variables are missing. More research is required before we can explain the seemingly contradictory results."

REVIEWER'S NOTES AND COMMENTS:

None

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 194

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Baiow, I. H. & Ruddeii, A. K. The effects of three types of grouping on achievement. California Journal of Educational Research, 1963, 14, 108-117.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Baiow & Ruddeii, 1963, Three Types of Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a well-done study revealing the effects of IQ level and grouping plan on achievement in a variety of curricular areas.

SYNOPSIS:

This study was designed to compare growth in achievement among students receiving instruction within three different grouping plans--homogeneous (students grouped according to measured ability within a certain curricular area), cluster (students grouped together according to general ability level), and heterogeneous (students grouped randomly). Data on achievement growth of three different intelligence levels of children in ten different facets of the elementary curriculum were gathered. All sixth graders in four California schools participated. Two schools used heterogeneous grouping, one used homogeneous grouping and one used cluster grouping. IQ and grouping plan information was analyzed in relation to pre- and posttest achievement in ten areas of the Metropolitan Achievement Test--word knowledge, reading, spelling, language, language skills, arithmetic computation, arithmetic problem solving, social studies information, social studies skills and science.

ITEM NUMBER: 194

SHORT TITLE: Baiow & Ruddeii, 1963  
Three Types of Grouping

RESEARCHER'S FINDINGS:

No significant differences between grouping plans were found in eight of the areas (the homogeneous groups performed significantly better in language growth and the cluster group performed significantly better in arithmetic computation).

No significant differences between IQ groups were found for eight of the areas (the middle IQ group evidenced the greatest growth in language skills and arithmetic computation).

There were no significant interactions between grouping plan and IQ level for nine of the areas (the high IQ students grouped homogeneously evidenced the greatest growth).

RESEARCHER'S CONCLUSIONS:

- "1. Grouping children either homogeneously or in clusters generally does not result in greater growth in various facets of the elementary school curriculum....
- "2. The homegeneous grouping experiment [carried out in one school to improve reading achievement] did not succeed. In fact, the homogeneous grouping plan resulted in less growth in reading (though this difference was not significant) than the heterogeneous grouping plan....
- "3. The homogeneous grouping plan [carried out in one school to improve arithmetic achievement] did not succeed. The cluster group had the highest gain, the homogeneous next and the heterogeneous group least....
- "4. A trend was found to be significant in this study; with the cluster group likely to be highest in growth, followed by the homogeneous group and then the heterogeneous group....
- "5. The teaching in these schools seems to be aimed at the middle ability groups regardless of grouping plan employed.
- "6. Administrative grouping does not appear to solve the problem of how to increase achievement."

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the backup file on Ability Grouping.

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 198

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Berkun, M. M., Swanson, L. W. & Sawyer, D. M. An experiment on homogeneous grouping for reading in elementary classes. Journal of Educational Research, 1966, 59(9), 413-414.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Berkun, et al., 1966, Homogeneous Reading Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE X SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 3 [4] 5 (Strong)

BRIEF DISCUSSION OF RATING:

This is a well-designed and conducted study. Data were submitted to several adjustment processes to control errors.

SYNOPSIS:

The purposes of this study were: (1) to determine the effects of homogeneous grouping on high- and low-achieving students ("those initially above or below their grade mean"), and (2) to assess the reliability of the group reading test used to classify the children. Approximately 1,100 third, fourth and fifth graders from five selected schools participated. Students in nine grades (three schools' third grades, four schools' fourth grades, and two schools' fifth grades) were heterogeneously grouped and served as the control group. Six experimental grades (two third grades, one fourth grade and three fifth grades) were put into 18 homogeneous ability groups. Grouping decisions were made based on California Reading Test scores. Students received instruction from October to April, and then were given another form of the test.



ITEM NUMBER: 198

SHORT TITLE: Berkun, et al., 1966  
Homogeneous Reading Grouping

RESEARCHER'S FINDINGS:

The overall net advantage for the experimentally grouped pupils was statistically significant--0.4 years reading level ahead of the nongrouped pupils. For the total groups, both grade three and grade five showed a significant advantage, with no effect on grade four alone. ("this indicates a very specific interaction between the grouping treatment and course content which should be kept in mind in educational planning...")

Among the third and fifth graders (where differences were obtained), the difference in the size of the advantage for initially high scoring and initially low scoring readers is not statistically significant.

RESEARCHER'S CONCLUSIONS:

"...one need not conclude, as some have argued, that...less-well-endowed children necessarily suffer from homogeneous ability grouping...."

"There was a tendency for [the advantage of homogeneous grouping] to be larger in the fifth grade and to be larger among those initially above average in reading level, but even the initially-below-average children demonstrated a significant advantage of the homogeneous grouping."

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the backup file on Ability Grouping.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 201

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Zweibelson, I., Bahnmuller, M. & Lyman, L. Team teaching and flexible grouping in the junior high school social studies. The Journal of Experimental Education, 1965, 3, 20-25.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Zweibelson, et al., 1965, Team Teaching & Flexible Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      [3]                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

This report of project outcomes indicates that the experiment was well-designed and conducted.

SYNOPSIS:

This is a report of the outcomes of a demonstration project which involved the use of flexible grouping and team teaching for social studies instruction. Project personnel hypothesized that students of differing abilities grouped heterogenenously and taught with a planned team approach (the experimental group), in comparison with students grouped homogeneously and taught by traditional methods (the control group) would: (1) perform as well as on social studies achievement tests; (2) have significantly better attitudes toward social studies, school and their teachers; and (3) have better attitudes toward other students of different socioeconomic backgrounds. Pre- and posttests were administered, and data on student attitudes were gathered via a questionnaire. Comparisons were made between pairs of students (one experimental, one control) who were of similar IQ levels, similar achievement levels, etc.

ITEM NUMBER: 201

SHORT TITLE: Zweibelson, et al., 1965  
Team Teaching & Flexible Grouping

Although 600 experimental and control students in grades 7, 8 and 9 were involved in the study, this report concerns itself with an analyses of the data on 94 team-taught and 93 control students in grade 9.

#### RESEARCHER'S FINDINGS:

There were no significant achievement differences between experimental and control students.

Significant differences were found regarding attitudes toward social studies, school and teachers--differences which favored the experimental students. There were also significant differences favoring the experimental group with regard to attitude questions having to do with self-confidence and independence. Both groups developed more positive attitudes toward learning and change. Both groups evidenced increased social resistance from the beginning of the year until the end. (This last was attributed to the small number of items in the "Social Resistance" category on the questionnaire.)

#### RESEARCHER'S CONCLUSIONS:

"...in view of the evidence that the team-taught sample had significantly better attitudes toward social studies, teacher-student relationships and school satisfaction with no diminution of achievement as compared with students taught in a traditional classroom situation, the results of this project imply that the demonstrated changes in instructional techniques and grouping procedures for social studies are warranted.

"The planned team teaching approach provided effective ways to deal with class size instructional task and activity variations. The heterogeneous grouping of youngsters for team purposes was felt to be more productive of democratic living than homogeneous grouping."

#### REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the backup file on Ability Grouping.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 202

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: French, J. W. Evidence from school records on the effectiveness of ability grouping. Journal of Educational Research, 1960, 54, (3), 83-91.

DESCRIPTORS: Ability Grouping

SHORT TITLE: French, 1960, School Records on Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS X

RELEVANT      IRRELEVANT ✓ FOR PRESENT PURPOSE

PRIMARY SOURCE      SECONDARY SOURCE      DISSERTATION ABSTRACT     

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

SYNOPSIS:

This analysis is drawn largely from data on the effectiveness of grouping procedures for students in military training classes.

ITEM NUMBER: 202

SHORT TITLE: French, 1960  
School Records on Grouping

RESEARCHER'S FINDINGS:

None found.

RESEARCHER'S CONCLUSIONS:

None drawn.

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the backup file on Ability Grouping.

6.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 204

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Dewar, J. A. Grouping for arithmetic instruction in sixth grade.  
Elementary School Journal, 1963, 63, 266-269.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Dewar, 1963, Sixth Grade Ability Grouping

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      [3]                      4                      5 (Strong)

BRIEF DISCUSSION OF RATING:

This study was well-executed.

SYNOPSIS:

This study sought to determine whether pupils who received arithmetic instruction within a three-group ability grouping structure would show significantly better achievement than those receiving instruction in a traditional, whole-class setting. Four experimental (homogeneously grouped) and four control (ungrouped) classes of sixth graders comprised the sample. The SAT arithmetic test results and teacher judgments were used to group experimental students, and students were posttested with an alternative form of the SAT arithmetic test. Teacher and student attitudes were gathered via a questionnaire. Control students were grouped for statistical analysis, though not for instruction.

ITEM NUMBER: 204

SHORT TITLE: Dewar, 1963  
Sixth Grade Ability Grouping

RESEARCHER'S FINDINGS:

Experimental Group 1 (the high-ability group) and 3 (the low-ability group) gained significantly over control students. There was no significant difference between experimental and Control Group 2.

The results of the teacher opinionnaire indicated that the teachers could see more and better learning occurring among experimental students (especially Groups 1 and 3) and that the experimental students were more responsive to arithmetic instruction.

Only the experimental students completed the student opinionnaire, and their responses to receiving instruction in the homogeneous groups was extremely positive.

RESEARCHER'S CONCLUSIONS:

This study presents evidence that this type of organization may have value. Similar studies are needed to determine whether the value indicated by those results is valid.

REVIEWER'S NOTES AND COMMENTS:

A copy of the study may be found in the backup file on Ability Grouping.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 205

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Plewes, J. A. Mixed-ability teaching--a deterioration in performance. Journal of Research in Science, 1979, 16, 229-236.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Plewes, 1979, Mixed Ability Teaching

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING: .

This is a well-designed and conducted study.

SYNOPSIS:

This study was designed to determine the relative effects of homogeneous and heterogeneous ability grouping on science achievement and student attitude and to find out whether the effects of grouping strategy are related to either teacher effectiveness or student ability. One-hundred sixty 11 and 12 year-old British students participated in the study during the 1974-75 school year. The study began with the students being divided into four mixed-ability tutorial groups. Two of the groups were then reordered into four homogeneous ability groups. Homogeneous and heterogeneous groups received instruction for half the school year and were then reordered again--the homogeneously grouped students were arranged heterogeneously and vice versa. Achievement and attitude data were gathered and data were analyzed to determine what relationships existed between grouping, on the one hand, and student ability and teacher effectiveness, on the other.



ITEM NUMBER: 205

SHORT TITLE: Plewes, 1979  
Mixed Ability Teaching

RESEARCHER'S FINDINGS:

Achievement: Although some pupils performed better in the mixed-ability groups, the large majority improved their scores in the homogeneous groups. The order in which the students participated in the two kinds of groups made no difference. There were no differences in comparative performance between the different levels of ability.

Attitude: Students overwhelmingly preferred working in the homogeneous groups.

In cases where the same teachers taught the same students in both settings, teacher performance with these students was superior in the homogeneous setting.

RESEARCHER'S CONCLUSIONS:

"It seems...that the greater stress and effort required to organize and teach mixed-ability classes do not reward the teacher with pupils who perform at a higher level. Maybe social and long-term educational advantages more than counteract this deterioration in immediate performance but these advantages need to be carefully defined, measured, and studied before moving over wholesale to mixed-ability methods.... A final point, which emerges clearly from this investigation, is that pupils themselves preferred being taught in groups ordered by ability and this may have an important effect on their performance. It has too easily been assumed in the past that pupils, especially of lower ability, would prefer the mixed-ability situation. This investigation throws doubts on this premise."

REVIEWER'S NOTES AND COMMENTS:

A copy of the report is in the Group Size backup file.

6.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 206

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Gabel, D. & Herron, J. D. The effects of grouping and pacing on learning rate, attitude and retention in ISCS Classrooms. Journal of Research in Science Teaching, 1977, 14, 385-399.

DESCRIPTORS: Ability Grouping, Group Size

SHORT TITLE: Gabel & Herron, 1977, Effects of Grouping and Pacing

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1                      2                      3                      [4]                      5                      (Strong)

BRIEF DISCUSSION OF RATING:

This is a carefully designed and conducted study.

SYNOPSIS:

This study was designed to determine the effects of different grouping and pacing arrangements on learning rate, retention and attitude. The subjects were 1,022 seventh grade students enrolled in Intermediate Science Curriculum Study (ISCS) programs in rural and urban schools. Students were given mental ability tests and then studied the ISCS materials (1) alone, (2) with a partner of similar ability or (3) with a partner of different ability; and either (1) with imposed deadlines or (2) self-paced. Chapter, unit and attitude tests were administered. Data for rural and urban students were analyzed separately.

ITEM NUMBER: 206

SHORT TITLE: Gabel & Herron, 1977  
Effects of Grouping and Pacing

RESEARCHER'S FINDINGS:\*

Learning Rate: Generally, city children who worked with a partner learned more rapidly than those who worked alone; for rural children the opposite was true. Kind of pacing had no effect on the learning rate of rural children, but for the urban children who worked alone, self-pacing increased their learning rate. This was especially true for low- and middle-ability children.

Retention: For both rural and urban children, retention was improved if learning was self-paced. Rural children who worked with a partner had better retention; there was no difference for urban children. There were virtually no differences in retention scores for self-paced students of the same mental ability whether students worked alone or with partners.

Attitude: All students had a favorable attitude toward the ISCS program, with urban children having the most favorable attitudes. There was no significant difference between the attitudes of children who had studied with deadlines or self-pacing, or between students who worked alone or with a partner.

RESEARCHER'S CONCLUSIONS:

High-ability students learn faster than low-ability students.

In general, students learn more effectively when they are allowed to pace themselves than when they are given deadlines, though there are some exceptions to this.

For low-ability students, working alone seems most beneficial to learning rate, but for some low-ability students working with a partner improved retention. Low-ability students appear to benefit from self-paced learning.

REVIEWER'S NOTES AND COMMENTS:

A copy of the report may be found in the backup files on Ability Grouping and on Group Size.

\*These are selected from the many pages of findings generated due to the study having so many cells.

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SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER. 207

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Provus, M. M. Ability grouping in arithmetic. Elementary School Journal, 1960, 60, 391-398.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Provus, 1960, Homewood Grouping Study

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 2 [3] 4 5 (Strong)

BRIEF DISCUSSION OF RATING:

This study was well-structured and conducted.

SYNOPSIS:

This study compared the effects of homogeneous and heterogeneous ability grouping on the arithmetic achievement of students in grades 4, 5 and 6. Nineteen classes participated, eight of which were heterogeneously grouped and eleven of which were grouped homogeneously. Students were pre- and posttested using arithmetic subtests of the Iowa Test of Basic Skills, the Metropolitan Achievement Test and measures of attitude toward mathematics. Teacher attitudes were also measured.

ITEM NUMBER: 207

SHORT TITLE: Provus, 1960  
Homewood Grouping Study

RESEARCHER'S FINDINGS:

Comparing all homogeneously grouped students with all heterogeneously grouped students revealed significantly greater achievement growth on the part of the homogeneously grouped classes.

Comparing students by ability level revealed that homogeneously grouped high- and middle-ability students performed better than heterogeneously grouped students of similar ability levels. The heterogeneously grouped low-ability students, however, performed somewhat better than the low-ability homogeneously grouped students. The performance differences were statistically significant only for the high-ability group.

There were no significant attitude differences between homogeneously and heterogeneously grouped students.

There were no significant differences in teacher attitude regarding student progress, teaching satisfaction or responses to parent input. Teachers indicated a desire to continue the program of ability grouping, though some had reservations, such as fear of discipline problems with slow groups, fear that students might not be properly placed, etc.

RESEARCHER'S CONCLUSIONS:

Homogeneously grouped students were more familiar with arithmetic concepts and many children so grouped were more familiar with arithmetic fundamentals.

"...the more competent pupils profited most from ability grouping. The average children may have profited slightly, and the slow learners may have profited no more from ability grouping than they would have from a heterogeneous class."

The attitude changes observed were unrelated to the kind of instructional setting.

For the most part, teachers supported the program, and all expressed a desire to teach homogeneous classes the following year.

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the backup file on Ability Grouping.

SCHOOL EFFECTIVENESS PROJECT, ITEM REPORT

ITEM NUMBER: 208

LOCATION: RSE Project Files

REVIEWER: K. Cotton

DATE REVIEWED: April 1981

CITATION: Mann, M. What does ability grouping do to the self-concept?  
Childhood Education, 1960, 36, 357-360.

DESCRIPTORS: Ability Grouping

SHORT TITLE: Mann, 1960, Ability Grouping and Self-Concept

SKIMMED, REJECTED FOR PROJECT PURPOSES, NO ANALYSIS \_\_\_\_

RELEVANT ☒ IRRELEVANT \_\_\_\_ FOR PRESENT PURPOSE

PRIMARY SOURCE ☒ SECONDARY SOURCE \_\_\_\_ DISSERTATION ABSTRACT \_\_\_\_

RATING OF QUALITY OF STUDY (for project purposes):

(Weak) 1 [2] 3 4 (Strong)

BRIEF DISCUSSION OF RATING:

This study involved considerable speculation and a survey instrument with only two relevant questions.

SYNOPSIS:

This study was designed to determine what effects ability grouping has on the self-concept of students. One-hundred two fifth graders who had been ability grouped since entering school were given a short questionnaire in order to gather their responses to their group placements. All students were in one of four ability groups (Sections 1, 2, 3 and 4, from highest to lowest ability) and remained in the same group for all subjects. The questionnaire contained three "blind" (irrelevant) questions and two relevant ones. The relevant questions were: "Tell me which fifth grade you are in", and "Tell me how you happen to be in this particular fifth grade group rather than some other group."

ITEM NUMBER: 208

SHORT TITLE: Mann, 1960

Ability Grouping and Self-Concept

RESEARCHER'S FINDINGS:

Section 1 (high ability) children and Section 4 (low ability) children tended to identify their group placement by ability level ("smart" or "dumb", "best" or "worst"), while Sections 2 and 3 children were more inclined to identify their group by the teachers name.

When asked why they were placed in the group they were in: (1) Section 1 children tended to give positive responses about ability ("I'm smart", "This is the best fifth grade"; (2) children in Section 2 and 3 tended to be unclear about the reasons for their placement ("I do not know", "My name was on the list", "They put me here"); Section 4 children tended to give negative responses about ability or achievement ("I/we are too dumb," "I/we don't know very much").

RESEARCHER'S CONCLUSIONS:

"Before we grasp the straw of ability grouping as the answer to instructional problems brought about by individual differences in academic potentiality, we need to re-examine what has already been done with ability grouping."

REVIEWER'S NOTES AND COMMENTS:

A copy of the article may be found in the backup file on Ability Grouping.

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